

### AMENDMENTS TO THE ABSTRACT

Please replace the abstract with the following:

The present invention provides methods for monitoring disease states in a subject, as well as methods for monitoring the levels of effect of therapies upon a subject having one or more disease states. The methods involve: (i) measuring abundances of cellular constituents in a cell from a subject ~~so that to obtain~~ a diagnostic profile ~~is obtained~~, (ii) measuring abundances of cellular constituents in a cell of one or more analogous subjects ~~so that to obtain~~ perturbation response profiles ~~are obtained~~ which correlate to a particular disease or therapy, and (iii) determining the interpolated perturbation response profile or profiles which best fit the diagnostic profile ~~according to some objective measure~~. In other aspects, the invention also provides a computer system capable of performing the methods of the invention, ~~data-bases~~ databases comprising perturbation response profiles for one or more diseases and/or therapies, and kits for determining levels of disease states and/or therapeutic effects according to the methods of the invention.